Mr. C. E. HELLMAYR, in exhibiting specimens of the new Coot and its relatives, stated that for many years he had been aware of the variation in the frontal plate of F. ardesiaca without being able to offer any plausible explanation. After carefully studying large series from the Andean region he was now inclined to agree with Mr. Morrison in admitting two species. The white-fronted and the red-fronted birds breed side by side in suitable places in Ecuador (Lake Yaguarcocha, Colta) and Peru (Lake Junín). The white-fronted bird, however, did not apparently range beyond Peru, since all of the numerous specimens seen by him from Bolivia, Chile, and Argentina were of the red-fronted species. He also added that, thanks to the courtesy of Prof. O. Fuhrmann, who most obligingly sent the type from the Museum at Neuchâtel, Switzerland, he was enabled to ascertain that F. ardesiaca Tschudi referred to the white-fronted species. The red-fronted bird he considered as nearly related to F. americana columbiana of the Colombian Andes, but distinguishable by the characters indicated by the describer. The present form has been fully described by Hartlaub (J. f. O. 1853, Extra-Heft, p. 81) from Bolivian specimens in the Paris Museum as F. chilensis "Desmurs," but the bird figured by Gay (Hist. Fis. Pol. Chile, Atlas, pl. 10, 1848), and later described by Des Murs (in Gay, Hist. Fis. Chile, Zool. viii. 1854, p. 474) under that name, was clearly the common Chilean Coot, F. armillata.

A new Species of Paradise Bird of the Genus Astrapia.

Mr. C. R. Stonor exhibited and described:—

Astrapia mayeri, sp. nov.

Description.—Known only from two central rectrices, three other rectrices, two secondaries, and one greater wing-covert of a male. The two central rectrices are 81.6 cm. in length, pure white for most of their length, and tipped with dark brown. The brown colour commences 3.5 cm. from the tip, and the transition from it to the white of the rest of the feather is abrupt. The terminal 11 cm. of the shaft is brown, as is

also a very narrow strip of the vane on each side of it. These two feathers are sharply pointed, and the vane is extremely narrow relative to the total length, giving them a ribbon-like appearance; the average width is about 2·2 cm. The total length is slightly greater than the figure given, as they had been broken off above the point of the quill.

The other three rectrices are 12, 10, and 7.5 cm. in length, sharply pointed, and dark brown in colour. There is evidently a very great disproportion between the two central feathers and the rest of the tail. The secondaries and greater wing-covert are dark brown, spangled with purple on the upper surface, as in the males of many Paradise Birds.

Distribution.—At present rests on two field-records: from the vicinity of Mt. Champion on the northern border of Papua; and eighty to a hundred miles west of Mt. Hagen in the Mandated Territory.

Type.—In British Museum (Natural History). Feathers taken by a missionary from the head-dress of a native on Mt. Hagen, North-East New Guinea (see below).

 $\it Type\mbox{-}locality.\mbox{--}Vicinity of Mt. Champion}$; where first observed by Hides.

Remarks.—The history of this remarkable bird is well told in a letter from Mr. F. Shaw Mayer, written at Singapore on December 16, 1938. He says: "I am sending you two tailfeathers of a new Bird of Paradise (Astrapia?). Briefly the history of the white-tailed bird; the first mention of a new Bird of Paradise, is in the late J. G. Hides's book 'Papuan Wonderland' published 1936; on p. 106: 'As I stood in the branches of this tree gazing at the rock and heather-covered summit of the peaks in front of me, I noticed pairs of an interesting species of paradise birds flitting through the mosscovered branches of the trees around me. The males had two long ivory-white feathers as a tail, with which they made flicking noises as they trailed the plumes after them through the air. I did not know the species, so for the information of our ornithological department, I instructed one of the police to shoot a male bird, remove the tail-feathers, and carefully pack them away."

Mr. Shaw Mayer continues: "On this expedition Mr. Hides was accompanied by Mr. O'Malley, a patrol officer. In December of last year I met Mr. O'Malley and questioned him about the birds.

"He remembered them quite well, and described the bird as being black in some lights and showing colours in others. Very true of the Astrapius. I was able to show him my live Princess Stephanie's (A. stephaniæ), and he agreed they were very like these birds, only the body was a little smaller and, of course, had the two long white tail-feathers. He could not tell me what happened to the two feathers they brought back. He said the beak was short and not long like that of my live Epimachus. In May of this year I had a long talk with the Fox brothers, two New Guinea miners, who also made a remarkable journey of some hundreds of miles through the wild country west of Mt. Hagen.

"They remembered meeting the white-tails well, some eighty to a hundred miles west of Mt. Hagen. The natives of that part wore the tail-feathers in their hair.

"The Fox brothers memories were better, as they thought these feathers had a black tip. They described the bird much as O'Malley did, and remarked about the flicking of the tailfeathers. They brought nothing back, but thought one of their boys might have saved a feather or two from a native's head. However, nothing turned up.

"In the middle of last August I was given by a missionary the two tail-feathers I am sending you. They were taken out of the hair on the head of a Mt. Hagen native. The bird is not found though in the Mt. Hagen district, but about eighty to a hundred miles west of it. It was a very great joy to see the feathers. I was surprised to find them so narrow.... I give the feathers to the Museum quite freely."

Affinities.—As Mr. Shaw Mayer suggests, there seems no doubt that this most interesting discovery belongs to the genus Astrapia. In the extraordinary length of the two central tail-feathers it comes nearest to A. stephaniæ of Eastern New Guinea; and from the relative shortness of the three other tail-feathers it is quite clear that it also resembles it in the

excessive lengthening of the two central feathers in relation to the rest of the tail; in the other three species of the genus although the tail is very long, it is evenly and regularly graduated. Although the bird is described as smaller than A. stephaniæ, the two feathers sent are 16·3 cm. longer than the average of three males of the latter species.

The coloration approximates very closely to the small A. splendidissima, wherein the two central rectrices have just the same pattern of white, tipped with dark brown. A suspicion of this is to be seen in A. stephaniæ, where the proximal section of the feather-shaft is white, while the rest is dark as in A. nigra and A. rothschildi.

The two long feathers are quite unique by virtue of their extreme narrowness described above. This condition is quite the reverse of what is found in three of the other four species, which have the tail-feathers unusually broad. In A. splendidissima the two central feathers are distinctly narrow for the greater part of their length, but broaden out into a rounded lobe near the tip. Presumably their extraordinary form in the new species is connected with the display of the males.

It would appear, therefore, that the new bird is from the same stock as A. stephaniæ and A. splendidissima, and this is borne out by the distribution as at present known, for the former species is found to the east, while splendidissima replaces it to the west.

It is just possible that the new bird may be the male of Astrapia stephaniæ feminina, described by Neumann from females and an immature male in 1922; and which was taken about a hundred and twenty miles to the north-west of Mount Champion. But in A. splendidissima, the other member of the genus with white on the tail, this character is in both sexes: and since the male of the new species has considerably more white than splendidissima, it is hardly likely that the female has none at all, as is evidently the case with feminina, from Neumann's description. I consider that (as already suggested by Dr. Stresemann, Archiv f. Naturgesch. lxxxix. 1924). Neumann's bird will probably prove to be the female of another new species, the male of which is as yet undiscovered.

In view of the trouble he has taken to establish its existence, and as a slight recognition of the efforts he has made during the past few years to add to our knowledge of the family as a whole, it is a pleasure to name this most striking new bird after its discoverer, *Astrapia mayeri*, Shaw Mayer's Bird of Paradise.

The Sulphur- and White-breasted Toucan (Ramphastos vitellinus) in the nesting-cavity.

Mr. B. G. Harrison exhibited a photograph of a Toucan, and made the following remarks:—

This photograph was taken last March in the neighbourhood of Mount Harris, Trinidad, B.W.I., by Mr. Ernest Chenery of the Imperial College of Tropical Agriculture. The nestinghole was at an altitude of some seventy feet, and as the tree had no low branches, the only method of reaching the site was by means of transverse wooden slats nailed to the trunk.

This Toucan usually nests at a considerable altitude and must consequently present considerable difficulty to the photographer. I am not aware of any previous photograph of this species at its nesting-site.

Birds of Morocco.

Colonel Meinertzhagen showed some excellent slides and remarked:—

On a recent trip in Morocco, when the Great Moroccan Atlas was visited at three points and subsequently the Anti Atlas was crossed and a trip made as far south as Goulimine, near the Rio d'Oro, the Sous Valley was explored and the Moroccan Sahara visited as far as Erfoud and Ksar es Souk. The Atlas was again crossed, and Azrou was visited during a snow period. Search for the scarce Guinea Fowl was made at Oulmes in the steep valleys, but it is almost extinct. The account of the trip was illustrated by lantern-slides.

Some twenty species new to Morocco were recorded, besides a new species of *Sylvia* and several new forms. Series of Moroccan birds in fresh plumage, which have never before existed, were brought back.